Call for Contributions

Inform the Chair: with the Title of your Contribution
Submission URL:
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Please select Track Preference as **PERF-CLOUD**

Special track

PERF-CLOUD: Performance Monitoring, Tracing and Improvement of Applications on the Cloud

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along with
CLOUD COMPUTING 2017, February 19 - 23, 2017 - Athens, Greece
The Eighth International Conference on Cloud Computing, GRIDs, and Virtualization
http://www.iaria.org/conferences2017/CLOUDCOMPUTING17.html

Performance variation is one of the major issues for the Cloud. Several factors are responsible for this variation, however virtualization is deemed to be the most important one. Virtualization is the underlying technology, which makes the pay-as-you-go model possible for the Cloud. Data centers are dependent on the virtualization for providing the Cloud services. Inside data centers, virtual machines are often consolidated to reduce energy consumption and increase resource utilization of the running servers.

One of the main drawbacks of consolidation is the performance variation of virtual machines. Consolidated virtual machines share resources of the same physical server, thus they have impact on the performance of each other. As a result, tasks running on these virtual machines inevitably face performance degradation. No application on the Cloud is immune to this; however, the impact is most visible for the data intensive and time-critical applications.

Data centers are required to monitor the performances of virtualized servers in real time. This is not an easy task, especially for thousands of servers and countless virtual machines. Cloud users want the best performance from their rented virtual machines. Therefore, it is necessary to know which types of applications can be consolidated with which other types of applications. This problem needs to be tackled from both the theoretical and practical angle. This track focuses on works, which analyze the existing application execution traces for performance improvement, designing new experiments for evaluating consolidation performance and new approaches for performance monitoring. Solution to above problems would help data centers to reduce energy consumption and provide better services to Cloud users.

As such, submissions are welcome regarding these topics:

- Real-time data center performance monitoring - new approaches and evaluation of existing ones
- Energy-aware virtual machine consolidation
- Modeling performance variation of applications on consolidated server
- Performance improvement and resource utilization of virtualized servers
- Analyzing application execution traces on the Cloud
- Experiments with application performance and consolidation on the Cloud

- Heuristic algorithms for scheduling tasks on virtual machines
- Survey of existing approaches for virtual machine consolidation and performance

Important Datelines
- Inform the Chair: As soon as you decided and secured the financial support
- Submission: January 15
- Notification with comments for camera-ready: January 25
- Registration: February 5
- Camera ready: February 8

Contribution Types
- Regular papers [in the proceedings, digital library]
- Short papers (work in progress) [in the proceedings, digital library]
- Posters: two pages [in the proceedings, digital library]
- Posters: slide only [slide-deck posted on www.iaria.org]
- Presentations: slide only [slide-deck posted on www.iaria.org]
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- See: http://www.iaria.org/format.html
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- Extended versions of selected papers will be published in IARIA Journals: http://www.iariajournals.org
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Registration
- Each accepted paper needs at least one full registration, before the camera-ready manuscript can be included in the proceedings.
- Registration fees are available at http://www.iaria.org/registration.html

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